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Patent
Attorney's Docket No. 027545-840

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

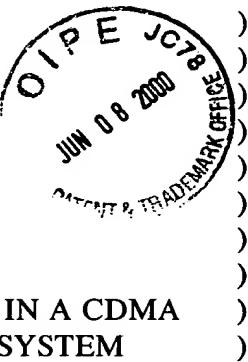
In re Patent Application of

Paul W. DENT

Application No.: 08/999,604

Filed: December 26, 1996

For: CALLING CHANNEL IN A CDMA
COMMUNICATIONS SYSTEM



Group Art Unit: 2731

Examiner: W. Luther

TC 2700 MAIL ROOM

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RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Supplemental Official Action mailed May 9, 2000 in connection with the above identified reissue application, favorable reconsideration and allowance of the subject application are respectfully requested. Presently, claims 1-44 are pending.

Claims 29-44 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. This rejection was addressed in Applicant's response filed on February 24, 2000. However, the Supplemental Office Action apparently requests clarification regarding (1) whether the apparatuses identified by Applicant on February 24, 1999 include all materials and structures for accomplishing the claimed function or a subset thereof, (2) how "a single element can be more than a single element for each such instance" referring to Applicant's identification of

the same structural element in an exemplary embodiment as fulfilling an exemplary correspondence with multiple claim "elements" and (3) written descriptive support for method claims 29-32, 37-38 and 41.

With respect to the first issue, Applicant respectfully submits that, as explicitly expressed in the response, the elements identified from the specification show exemplary support in the original specification for each claimed "means for" element in Applicant's system claims. Applicant notes that different correspondences between elements described in the specification and claimed "means for" elements could likely also be identified. Regardless of whether the identified elements represent "all materials and structures or a subset" for accomplishing the claimed functions, Applicant respectfully submits that the identified elements present ample support in the original specification that Applicant did indeed have possession of the claimed invention at the time of filing. This is all that is required under 35 U.S.C. § 112, first paragraph.

With respect to the second issue, the Office Action requests clarification regarding "how a single element can be more than single element for each such instance, such as element 60 in Fig. 6 being both the 'means for assigning' and 'means for encoding'." Initially, Applicant notes that there is no requirement pursuant to 35 U.S.C. §112, first paragraph, that each claim "element" correspond to a unique element in the exemplary embodiments provided in the patent specification. However, Applicant has provided below a supplemental chart with additional, exemplary support for various claim elements.

Reissue claims	Specification
33. A code division multiple access communication system for transmitting control information and user traffic signals from a first base station to a plurality of mobile stations comprising: means for coding control information using a spread spectrum code unique to control information to form a calling channel signal, wherein a duration of each of a succession of data blocks in the calling channel signal is equal to a duration of a speech coder's analysis period and wherein said control information means carries information for a specified group of mobile stations only at predetermined times;	Figs. 2, 4 and 6; col. 4, starting on line 12; claim 1 or 24 combinations; and element 21
means for coding each user traffic signal using a spread spectrum code unique to each traffic signal;	element 22
means for adding said calling channel signal and said coded traffic signal to obtain a composite signal;	element 27
means for modulating said composite signal on a radio frequency carrier to form a radio frequency signal;	elements 28 & 29
means for transmitting said radio frequency signal to said plurality of said mobile stations;	antenna element shown in Fig. 2
means for receiving said radio frequency signal at at least one of said mobile stations;	Fig. 5; col. 5, starting on line 6; element 50
means for decoding said received signal in said mobile station to extract said control information; and	col. 5, lines 15-18; element 51
means for decoding said radio frequency signal in said mobile station to extract traffic information intended for said mobile station.	col. 5, lines 20-23; element 51
34. A code division multiple access communication system for paging a mobile station comprising: means for assigning said mobile station to a subgroup of data blocks to be transmitted on a calling channel;	Fig. 6; col 6 starting on line 19
means for encoding said subgroup of data blocks using a spread spectrum code assigned to said calling channel; and	col. 6, starting on line 57; element 60
means for transmitting a paging message to said mobile station in only said subgroup.	col. 6, lines 45-50

35. A code division multiple access communication system for paging a mobile station comprising: means for assigning said mobile station to a subgroup of data blocks to be transmitted on a calling channel;	Fig. 6; col 6, starting on line <u>19</u>
means for encoding said subgroup of data blocks using a spread spectrum code assigned to said calling channel; and	<u>col. 6, starting on line 57</u> ; element 60
means for transmitting a paging message to said mobile station in only said subgroup, wherein a duration of each of said data blocks is equal to a duration of a speech coder's analysis period.	col. 6, starting on line <u>45-56</u>

Thirdly, the Office Action seeks support for each “active step of manipulation” in the methods of claims 29-32, 37, 38 and 41. It is respectfully submitted that the claimed elements are indeed described in the specification to support that, at the time the application was filed, the inventor had possession of the claimed invention.

First, starting paragraph 6 in the Supplemental Declaration in Support of Reissue Application, Applicant has pointed out specific support in the original specification for reissue claim 29 combinations, claim 30 combinations and claim 31 combinations. Further, Applicant respectfully submits that support for the claim 29 combinations can be found, for example, in the patented claim 1. Moreover, Applicant provides the following chart showing exemplary support in the original specification for each claimed method steps. Applicant notes that different correspondences between described elements and claimed method steps could also be identified.

Reissue claims	Specification
<p>29. A method for transmitting control information and user traffic signals from a first base station to a plurality of mobile stations in a code division multiple access communication system comprising the steps of:</p> <p style="padding-left: 20px;">coding control information using a spread spectrum code unique to control information to form a calling channel signal, wherein a duration of each of a succession of data blocks in the calling channel signal is equal to a duration of a speech coder's analysis period and wherein said control information carries information for a specified group of mobile stations only at predetermined times;</p>	Claim 1; col. 6, lines 26-56.
<p style="padding-left: 20px;">coding each user traffic signal using a spread spectrum code unique to each traffic signal;</p> <p style="padding-left: 20px;">adding said calling channel signal and said coded traffic signal to obtain a composite signal;</p> <p style="padding-left: 20px;">modulating said composite signal on a radio frequency carrier to form a radio frequency signal;</p> <p style="padding-left: 20px;">transmitting said radio frequency signal to said plurality of said mobile stations;</p> <p style="padding-left: 20px;">receiving said radio frequency signal at at least one of said mobile stations;</p> <p style="padding-left: 20px;">decoding said received signal in said mobile station to extract said control information; and</p> <p style="padding-left: 20px;">decoding said radio frequency signal in said mobile station to extract traffic information intended for said mobile station.</p>	Claim 1
<p>30. A method for paging a mobile station in a code division multiple access communication system comprising the steps of:</p> <p style="padding-left: 20px;">assigning said mobile station to a subgroup of data blocks to be transmitted on a calling channel;</p>	Col. 6, starting on line 19
<p style="padding-left: 20px;">encoding said subgroup of data blocks using a spread spectrum code assigned to said calling channel; and</p>	Col. 6, starting on line 57
<p style="padding-left: 20px;">transmitting a paging message to said mobile station in only said subgroup.</p>	Col. 6, lines 45-50
<p>41. A method according to claim 30, further comprising the steps of:</p> <p style="padding-left: 20px;">powering up parts of a receiver in said mobile station during transmission of the subgroup of data blocks and powering down said parts of the receiver at other times;</p>	Col. 6, lines 19-25

receiving the subgroup of data blocks at the mobile station;	Col. 5, lines 7-10
using the received subgroup of data blocks to synchronize the mobile station with the code division multiple access system; and	Col. 5, starting on line 39
detecting the paging messages at the mobile station.	Col 5, lines 10-23
31. A method for paging a mobile station in a code division multiple access communication system comprising the steps of: assigning said mobile station to a subgroup of data blocks to be transmitted on a calling channel;	Col 6, starting on line 19
encoding said subgroup of data blocks using a spread spectrum code assigned to said calling channel; and	Col. 6, starting on line 57
transmitting a paging message to said mobile station in only said subgroup, wherein a duration of each of said data blocks is equal to a duration of a speech coder's analysis period.	Col. 6, starting on line 45-56
32. The method of claim 31, wherein said step of assigning further comprises the step of: using a mobile identification code associated with said mobile station to determine said assigned subgroup.	Col. 6, lines 34-36
38. The method of claim 31, further comprising receiving said paging message at said mobile station and	Col. 5, lines 7-10
using said paging message to maintain synchronization between the mobile station and the code division multiple access communication system.	Col. 5, starting on line 39

Applicant respectfully submits that the level of skill in this art is more than adequate to reasonably convey to one skilled in the art that the inventor, at the time the application was filed, had possession of, for example, a duration of each of a succession of data blocks in the calling channel signal being equal to a duration of a speech coder's analysis period in col. 6, lines 19-56 based on this specification. Certainly the Office cannot reasonably support the position that the inventor, at the time the application was filed, did not have possession of the claimed invention. Thus, it is respectfully submitted that all of the

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elements are described in the specification in the manner required by 35 U.S.C. § 112, first paragraph. Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested.

In view of all the above, applicant respectfully submits the present application is in condition for allowance, and prompt notice of the same is earnestly solicited. Should the Examiner have any questions regarding this response or the subject application in general, he or she is invited to contact the undersigned at the number provided below.

Respectfully submitted,

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